## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application. Listing of claims:

1. (Currently Amended) A compound of formula (I),

or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which:

## X is N or CH;

R<sub>1</sub> is hydrogen or C<sub>1-6</sub>alkyl or is taken together with R<sub>2</sub> or R<sub>3</sub> to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

R<sub>2</sub> is hydrogen, aryl, cycloalkyl, heteroaryl, or heterocyclo; or C<sub>1-6</sub>alkyl or C<sub>2-6</sub>alkenyl optionally substituted with one to three of hydroxy, alkoxy, halogen, cyano, trifluoromethyl, nitro, amino, alkylamino, aryl, cycloalkyl, or heteroaryl[:], and/or heterocyclo; or R<sub>2</sub> is taken together with R<sub>1</sub>-or R<sub>3</sub> to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocyclo; provided that where G is C<sub>2-6</sub>alkenyl, A<sub>1</sub>-NR<sub>18</sub>CO<sub>2</sub>R<sub>19</sub>, or A<sub>1</sub>-SO<sub>2</sub>R<sub>17</sub>, or when y is 0, R<sub>2</sub> may be or C<sub>1-6</sub>alkyl or C<sub>2-6</sub>alkenyl, each optionally substituted with heteroaryl;

R<sub>3</sub> is hydrogen or C<sub>1-6</sub>alkyl or is taken together with R<sub>2</sub> to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

E is E<sub>4</sub>, E<sub>2</sub>, E<sub>3</sub> or E<sub>4</sub>, wherein

E4-is-NR11R12;

- G is selected from  $G_{2-6}$ alkenyl,  $A_3$ -aryl,  $-OR_{18}$ , heteroaryl,  $A_1$ -cyano,  $A_2$ - $OR_{17}$ ,  $A_1$ - $C(=O)R_{18}$ ,  $A_1$ - $CO_2R_{18}$ ,  $A_1$ - $C(=O)NR_{18}R_{19}$ ,  $A_1$ - $OC(=O)R_{18}$ ,  $A_1$ - $NR_{18}C(=O)R_{19}$ ,  $A_1$ - $OC(=O)NR_{18}R_{19}$ ,  $A_1$ - $NR_{18}CO_2R_{19}$ ,  $A_1$ - $NR_{18}SO_2R_{17}$ ,  $A_1$ - $SO_2R_{17}$ ,  $A_1$ - $NR_{20}C(=O)NR_{18}R_{19}$ , and  $A_1$ - $SR_{18}$ , or when y is 0, or when W is a group other than  $NHR_{22}$ , G may be  $A_1$ -heterocyclo, wherein  $A_1$  is a bond,  $C_{1-6}$ alkylene or  $C_{2-6}$ alkenylene (straight or branched chain),  $A_2$  is  $C_{1-6}$ alkylene or  $C_2$ . Galkenylene, and G3 is G3 is G4 alkenylene; or where G4 is G5 is G5 alkenylene, G6 is G6 alkenylene, and G8 is G8 alkenylene, G9 is G9 alkenylene, each substituted with heteroaryl;
- W is selected from –NR<sub>21</sub>R<sub>22</sub>, –OR<sub>23</sub>, –NR<sub>21</sub>C(=O)R<sub>24</sub>, –NR<sub>21</sub>CO<sub>2</sub>R<sub>24</sub>, amidino, guanidino, or a substituted or unsubstituted heterocyclo, heteroaryl, or cycloalkyl selected from azepinyl, azetidinyl, imidazolyl, imidazolidinyl, pyrazolyl, pyridyl, pyrazinyl, pyridazinyl, 1,2-dihydropyridazinyl, pyranyl, tetrahydropyranyl, piperazinyl, homopiperazinyl, pyrrolyl, pyrrolidinyl, piperidinyl, thiazolyl, tetrahydrothiazolyl, thienyl, furyl, tetrahydrofuryl, morpholinyl, isoquinolinyl, tetrahydroisoquinolinyl, tetrazolyl, oxazolyl, tetrahydro-oxazolyl, and C<sub>3-7</sub>cycloalkyl, wherein said heteroaryl, heterocyclo or cycloalkyl groups may additionally have joined thereto an optionally substituted five-to-seven membered heterocyclic, heteroaryl, or carbocyclic ring;
- R<sub>4</sub> and R<sub>7</sub> are independently selected from hydrogen, alkyl, substituted alkyl, halogen, hydroxy, alkoxy, and keto;
- $R_5$ ,  $R_{5a}$ ,  $R_6$ ,  $R_6$ ,  $R_6$ ,  $R_8$  and  $R_9$  are independently hydrogen, halogen, cyano, alkyl, substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclo, aryl, heteroaryl,  $-OR_{25}$ ,  $-NR_{25}R_{26}$ ,  $-SR_{25}$   $-S(O)_pR_{26}$ ,  $-C(=O)R_{25}$ ,  $-OC(=O)R_{25}$ ,  $-CO_2R_{25}$ ,  $-C(=O)NR_{25}R_{26}$ ,  $-NR_{25}C(=O)R_{26}$ ,  $-OC(=O)NR_{25}R_{26}$ ,  $-NR_{25}CO_2R_{26}$ ,  $-NR_{27}C(=O)NR_{25}R_{26}$  or  $-NR_{25}SO_2R_{26}$ ; or  $R_{5a}$  and  $R_{5b}$ ,  $R_{6a}$  and  $R_{6b}$ , or  $R_8$  and  $R_9$  taken together form a keto group (=O) or a monocyclic or bicyclic cycloalkyl or heterocyclo joined in a spiro fashion to ring E, or alternatively,  $R_{5a}$  and/or  $R_{5b}$  together with  $R_8$  and/or  $R_9$ , or  $R_{6a}$  and/or  $R_{6b}$  together with  $R_8$  and/or  $R_9$ , are taken to form a fused carbocyclic, heterocyclic, or heteroaryl ring; provided that, when  $R_9$  is a  $R_{16}$  and  $R_{16}$  are hydrogen provided  $R_8$  and  $R_9$  are not both hydrogen;

R<sub>10</sub> is selected from hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heteroaryl, and hetereocyclo; R<sub>11</sub> is hydrogen or C<sub>1-8</sub>alkyl;

R<sub>12</sub> is C<sub>1-8</sub>alkyl, substituted C<sub>1-8</sub>alkyl, or cycloalkyl;

R<sub>13</sub>, R<sub>14</sub>, R<sub>15</sub> and R<sub>16</sub> are selected independently of each other from hydrogen, alkyl, substituted alkyl, amino, alkylamino, hydroxy, alkoxy, aryl, cycloalkyl, heteroaryl, or heterocyclo, or R<sub>13</sub> and R<sub>14</sub>, or R<sub>15</sub> and R<sub>16</sub>, when attached to the same carbon atom, may join to form a spirocycloalkyl ring;

R<sub>17</sub> is alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl;

 $R_{18}$ ,  $R_{19}$ , and  $R_{20}$  are independently selected from hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, aryl, heteroaryl, cycloalkyl, heterocyclo, or  $C(=O)R_{28}$ ; or when G is NH(C=O)R<sub>19</sub>, R<sub>19</sub> may be a bond joined to W to define a heterocyclo ring; provided, however, that when y is at least one, W is imidazolyl, indolyl,  $-NR_{21}R_{22}$ , or  $-OR_{23}$ , and G is  $-NR_{18}C(=O)R_{19}$ , then  $R_{19}$  is not a C<sub>1</sub>-alkyl having the substituent  $-NR_{29}R_{31}$ ;

R<sub>21</sub> and R<sub>22</sub> are selected from hydrogen, alkyl, and substituted alkyl;

R<sub>23</sub> and R<sub>24</sub> are independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, heterocyclo, and cycloalkyl;

R<sub>25</sub>, R<sub>26</sub> and R<sub>27</sub> are independently hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl; or R<sub>25</sub> and R<sub>26</sub> may join together to form a heterocyclo or heteroaryl, except R<sub>26</sub> is not hydrogen when joined to a sulfonyl group as in -S(O)<sub>p</sub>R<sub>26</sub> or -NR<sub>25</sub>SO<sub>2</sub>R<sub>26</sub>;

R<sub>28</sub> is hydrogen, alkyl, or substituted alkyl;

R<sub>29</sub> and R<sub>31</sub> are selected from hydrogen, alkyl, haloalkyl, hydroxyalkyl, phenylalkyl, and alkoxycarbonylalkyl, or R<sub>29</sub> and R<sub>31</sub> taken together form a heterocyclo ring;

n is 0, 1, 2, 3 or 4;

p is 1, 2, or 3;

r and s are 0 or 1;

x is 0, 1, or 2;

y is 0, 1, 2, 3 or 4; and

z is 0, 1, or 2.

2. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] <u>or hydrate</u>, <del>or prodrug</del> thereof, in which:

, in which:

G is selected from:

a) C2-4alkenyl optionally substituted with phenyl;

- $\underline{a}[b]$ )  $-CO_2R_{18}$ ,  $-C(=O)NR_{18}R_{19}$ ,  $-NR_{18}C(=O)R_{19}$ , and  $-SO_2R_{17}$ ,
- <u>c[d]</u>) when y is 0, or when W is a group other than NHR<sub>22</sub>, G also may be selected from optionally substituted pyrrolidinyl or piperidinyl;

R<sub>17</sub> is C<sub>1-4</sub>alkyl, C<sub>5-6</sub>cycloalkyl, phenyl or benzyl;

R<sub>18</sub>, R<sub>19</sub>, and R<sub>20</sub> are independently selected from hydrogen, C<sub>1-4</sub>alkyl, phenyl, benzyl, C<sub>5-6</sub>cycloalkyl, -C(=O)CH<sub>2</sub>(phenyloxy), -C(=O)CH<sub>2</sub>(benzyloxy), imidazolyl, pyridyl, furyl, thienyl, or C<sub>1-4</sub>alkyl or C<sub>2-4</sub>alkenyl substituted with one of phenyl, pyridyl, furyl, cyclopentyl, cyclohexyl, CO<sub>2</sub>Me, phenyloxy, or benzyloxy, wherein each ringed group of R<sub>18</sub>, R<sub>19</sub>, and R<sub>20</sub> in turn is optionally substituted with one to two R<sub>36</sub>, and/or optionally has a benzene ring or five membered heterocyclo having two oxygen atoms fused thereto; and

R<sub>36</sub> is halogen, methoxy, nitro, phenyl, phenyloxy, or alkylamino.

3. (Currently Amended) A compound according to claim 2, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

G is 
$$-NR_{18}C(=O)R_{19}$$
,

R<sub>18</sub> is hydrogen or lower alkyl, and

- R<sub>19</sub> is C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, phenyl, benzyl, C<sub>5-6</sub>cycloalkyl, -C(=O)CH<sub>2</sub>(phenyloxy), -C(=O)CH<sub>2</sub>(benzyloxy), imidazolyl, pyridyl, furyl, thienyl, or C<sub>1-4</sub>alkyl or C<sub>2-4</sub>alkenyl substituted with one of phenyl, phenyl, pyridyl, furyl, cyclopentyl, cyclohexyl, CO<sub>2</sub>Me, phenyloxy, and benzyloxy, wherein each ringed group of R<sub>19</sub> in turn is optionally substituted with one to two R<sub>36</sub>, and/or optionally has a benzene ring or five membered heterocyclo having two oxygen atoms fused thereto.
- 4. (Currently Amended) A compound according to claim 2, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which W is OH,  $-NH_2$ , -NHalkyl,  $-N(alkyl)_2$ , azetidinyl, imidazolyl, piperidinyl, pyrrolidinyl, or  $NHCO_2(alkyl)$ ; or a  $C_{4-7}$ cycloalkyl optionally substituted with lower alkyl,  $-NH_2$ , -NHalkyl, or  $-N(alkyl)_2$ .

5. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, having the formula:

$$(R_{30})_t$$
 $O$ 
 $NH$ 
 $N$ 
 $R_9$ 
 $R_9$ 

in which

K is phenyl or thiazolyl;

R<sub>30</sub> is selected from C<sub>1-4</sub>alkyl, hydroxy, alkoxy, halogen, nitro, cyano, amino, alkylamino, phenyl, and – C(=O)phenyl;

t is 0, 1 or 2; and v is 0, 1 or 2.

6. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

W is OH,  $-NR_{21}R_{22}$ ,  $-NHC(=O)R_{24}$ , or  $-NHCO_2$ alkyl;

- R<sub>21</sub> and R<sub>22</sub> are independently selected from hydrogen, C<sub>1-8</sub>alkyl, and (CH<sub>2</sub>)<sub>q</sub>-J, wherein J is selected from napthyl, furanyl, indolyl, imidazolyl, pyrimidinyl, benzothienyl, pyridinyl, pyrrolyl, pyrrolidinyl, thienyl, and C<sub>3-7</sub>cycloalkyl, wherein the alkyl, alkylene, and/or J groups of R<sub>21</sub> and/or R<sub>22</sub> are optionally substituted with up to three R<sub>33</sub>;
- $R_{24}$  is selected from  $C_{1-6}$ alkyl, trifluoromethyl, alkoxyalkyl, furylalkyl, alkylaminoethyl, phenyl, pyrollylalkyl, piperidinyl, and piperidinylalkyl, wherein  $R_{24}$  in turn is optionally substituted with one to two  $C_{1-4}$ alkyl and/or  $-CO_2(C_{1-4}$ alkyl);
- $R_{33}$  is selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-4}$ alkoxy, amino,  $C_{1-4}$ alkylamino, amino $C_{1-4}$ alkyl, trifluoromethyl, halogen, phenyl, benzyl, phenyloxy, benzyloxy,  $-C(=O)(CH_2)NH_2$ ,  $-CO_2(C_1-4)$ alkyl),  $-SO_2(C_{1-4}$ alkyl), tetrazolyl, piperidinyl, pyridinyl, and indolyl, wherein when  $R_{33}$  includes a ring, said ring in turn is optionally substituted with one to two  $C_{1-4}$ alkyl, hydroxy, methoxy, and/or halogen; and

q is 0, 1, 2 or 3.

(Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,]
 <u>or</u> hydrate, or prodrug thereof, in which

W is a ring selected from:

 $R_{34}$  at each occurrence is attached to any available carbon or nitrogen atom of W and is selected from  $C_{1-6}$ alkyl, halogen, amino, aminoalkyl, alkylamino, hydroxy,  $C_{1-4}$ alkoxy, hydroxy $C_{1-4}$ alkyl, -C(=O)alkyl, -C(=O)aminoalkyl, -C(=O)phenyl, -C(=O)benzyl,  $-CO_2$ alkyl,  $-CO_2$ phenyl,  $-CO_2$ benzyl,  $-SO_2$ alkyl,  $-SO_2$ aminoalkyl,  $-SO_2$ phenyl,  $-SO_2$ benzyl, phenyl, benzyl, phenyloxy, benzyloxy, pyrrolyl, pyrazolyl, piperidinyl, pyridinyl, pyrimidinyl, and tetrazolyl, and/or two  $R_{34}$  when attached to two adjacent carbon atoms or adjacent carbon and nitrogen atoms may be taken together to form a fused benzo, heterocyclo, or heteroaryl ring, and/or two  $R_{34}$  when attached to the same carbon atom (in the case of a non-aromatic ring) may form keto (=O), and each  $R_{34}$  in turn is optionally substituted with up to two  $R_{35}$ ;

R<sub>35</sub> is selected from halogen, trifluoromethyl, C<sub>1-4</sub>alkyl, cyano, nitro, trifluoromethoxy, amino, alkylamino, aminoalkyl, hydroxy, and C<sub>1-4</sub>alkoxy;

w is selected from 0, 1, or 2;

u is selected from 0, 1, 2, and 3; and v is 0, 1 or 2.

- 8. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which
- $R_8$  and  $R_9$  are selected independently from hydrogen, alkyl,  $-(CH_2)_j$ -C(=O)alkyl,  $-(CH_2)_j$ -phenyl,  $-(CH_2)_j$ -napthyl,  $-(CH_2)_j$ -C(=O)alkyl,  $-(CH_2)_j$ -heterocyclo, and  $-(CH_2)_j$ -heteroaryl, <u>provided R\_8 and R\_9 are not both hydrogen</u>, or R\_8 and R\_9 together form a spirocycloalkyl or spiroheterocyclic ring; and

*j* is selected from 0, 1, 2 and 3.

9. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] <u>or hydrate</u>, <del>or prodrug</del> thereof, in which

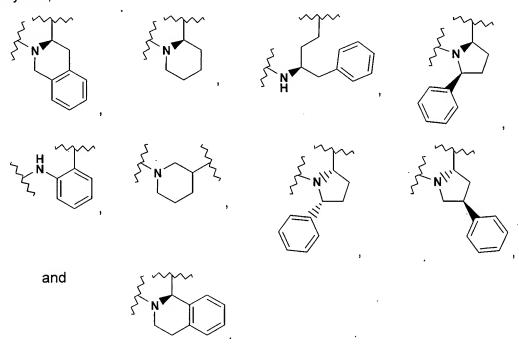
10. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which

R<sub>2</sub> is selected from hydrogen, C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, biphenyl, C<sub>2-6</sub>alkenylene-K, and -(CH<sub>2</sub>)<sub>g</sub>-K;

K is selected from phenyl, napthyl, thienyl, thiazolyl, pyridinyl, pyrimidinyl, and  $C_{5-6}$ cycloalkyl, wherein each group K in turn is optionally substituted with one to three  $R_{30}$  or has a benzene ring fused thereto, which also may be substituted with one to three  $R_{30}$ ;

R<sub>30</sub> is selected from C<sub>1-4</sub>alkyl, hydroxy, alkoxy, halogen, nitro, cyano, amino, alkylamino, phenyl, and acylphenyl; and

11. (Withdrawn) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which  $-X(R_1)-CH(R_2)-CH(R_3)_r-(CH_2)_s-$ , taken together are selected from  $C_{1-4}$ alkylene,



12. (Currently Amended) A compound according to claim 1, or a pharmaceutically-acceptable salt[,] <u>or hydrate</u>, <del>or prodrug</del> thereof, in which

X is N;

R<sub>1</sub> is hydrogen or C<sub>1-4</sub>alkyl[;]

r is 0; and

<del>s is 0.</del>

- 13. (Canceled)
- 14. (Currently Amended) A compound having the formula,

or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which:

## X is N or CH;

 $R_1$  is hydrogen or  $C_{1-6}$ alkyl or is taken together with  $R_2$  or  $R_3$  to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

R<sub>2</sub> is hydrogen, aryl, cycloalkyl, heteroaryl, or heterocyclo; or C<sub>1-6</sub>alkyl or C<sub>2-6</sub>alkenyl optionally substituted with one to three of hydroxy, alkoxy, halogen, cyano, trifluoromethyl, nitro, amino, alkylamino, aryl, cycloalkyl, or heteroaryl[;], and/or heterocyclo; or R<sub>2</sub> is taken together with R<sub>4</sub> or R<sub>3</sub> to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocyclo; provided that where G is C<sub>2-6</sub>alkenyl, A<sub>1</sub>–NR<sub>18</sub>CO<sub>2</sub>R<sub>19</sub>, or A<sub>1</sub>–SO<sub>2</sub>R<sub>17</sub>, or when y is 0, R<sub>2</sub> may be or C<sub>1-6</sub>alkyl or C<sub>2-6</sub>alkenyl, each optionally substituted with heteroaryl;

R<sub>3</sub> is hydrogen or C<sub>1-6</sub>alkyl or is taken together with R<sub>2</sub> to form a monocyclic or bicyclic aryl, cycloalkyl, heteroaryl or heterocycle;

E is E<sub>1</sub>, E<sub>2</sub>, E<sub>3</sub> or E<sub>4</sub>, wherein

E4 is -NR11R12;

G is selected from:

a) C24alkenyl optionally substituted with phenyl;

$$a[b]$$
)  $-CO_2R_{18}$ ,  $-C(=O)NR_{18}R_{19}$ ,  $-NR_{18}C(=O)R_{19}$ , and  $-SO_2R_{17}$ ,

- $\underline{b}[c]) \ C_{1-6} alkylene \ or \ C_{2-6} alkenylene \ joined \ to \ one \ of \ cyano, \ -OR_{17}, \ -C(=O)R_{18}, \ -CO_2R_{18}, \\ -C(=O)NR_{18}R_{19}, \ -NR_{18}C(=O)R_{19}, \ -NR_{18}CO_2R_{19}, \ -NR_{18}SO_2R_{17}, \ -SO_2R_{17}, \\ -NR_{20}C(=O)NR_{18}R_{19}, \ and \ -SR_{18};$
- <u>c[d]</u>) when y is 0, or when W is a group other than NHR<sub>22</sub>, G also may be selected from optionally substituted pyrrolidinyl or piperidinyl;
- W is selected from –NR<sub>21</sub>R<sub>22</sub>, –OR<sub>23</sub>, –NR<sub>21</sub>C(=O)R<sub>24</sub>, –NR<sub>21</sub>CO<sub>2</sub>R<sub>24</sub>, amidino, guanidino, or a substituted or unsubstituted heterocyclo, heteroaryl, or cycloalkyl group selected from azetidinyl, imidazolyl, imidazolidinyl, pyrazolyl, pyridyl, pyrazinyl, pyridazinyl, 1,2-dihydropyridazinyl, pyranyl, tetrahydropyranyl, piperazinyl, homopiperazinyl, pyrrolyl, pyrrolidinyl, piperidinyl, thiazolyl, tetrahydrothiazolyl, thienyl, furyl, tetrahydrofuryl, morpholinyl, isoquinolinyl, tetrahydroisoquinolinyl, tetrazolyl, oxazolyl, tetrahydro-oxazolyl, and C<sub>3-7</sub>cycloalkyl, wherein said heteroaryl, heterocyclo or cycloalkyl groups may additionally have fused thereto an optionally substituted five-to-seven membered heterocyclic, heteroaryl, or carbocyclic ring;
- R<sub>4</sub> and R<sub>7</sub> are independently selected from hydrogen, alkyl, substituted alkyl, halogen, hydroxy, alkoxy, and keto;
- R<sub>5</sub>, R<sub>5a</sub>, R<sub>6</sub>, R<sub>6</sub>, R<sub>6a</sub>, R<sub>6b</sub>, R<sub>8</sub> and R<sub>9</sub> are independently hydrogen, halogen, cyano, alkyl, substituted alkyl, alkenyl, hydroxy, alkoxy, alkoxycarbonyl, acyl, cycycloalkyl, heterocyclo, aryl, or heteroaryl; or R<sub>5a</sub> and R<sub>5b</sub>, R<sub>6a</sub> and R<sub>6b</sub>, or R<sub>8</sub> and R<sub>9</sub> taken together form a keto group (=O) or a monocyclic or bicyclic cycloalkyl or heterocyclo joined in a spiro fashion to ring E, or alternatively, R<sub>5a</sub> and/or R<sub>5b</sub> together with R<sub>8</sub> and/or R<sub>9</sub>, or R<sub>6a</sub> and/or R<sub>6b</sub> together with R<sub>8</sub> and/or R<sub>9</sub>, join together to form a fused benzene or heterocyclo ring; provided that, when G is a C<sub>1-6</sub>alkyl substituted with –OR<sub>17</sub>, –CO<sub>2</sub>R<sub>18</sub>, or –C(=O)NR<sub>18</sub>R<sub>19</sub>, then R<sub>5a</sub>, R<sub>5b</sub>, R<sub>6a</sub>, and R<sub>6b</sub> are hydrogen;

 $R_{10}$  is selected from hydrogen, alkyl, substituted alkyl, cycloalkyl, aryl, heteroaryl, and hetereocyclo;  $R_{11}$  is hydrogen or  $C_{1-8}$ alkyl;

 $R_{12}$  is  $C_{1-8}$ alkyl, substituted  $C_{1-8}$ alkyl, or cycloalkyl;

R<sub>17</sub> is alkyl, substituted alkyl, cycloalkyl, aryl, heterocyclo, or heteroaryl;

R<sub>18</sub>, R<sub>19</sub>, and R<sub>20</sub> are independently selected from hydrogen, alkyl, alkenyl, aryl, heteroaryl, cycloalkyl, heterocyclo, C(=O)R<sub>28</sub> or a C<sub>1-4</sub>alkyl or C<sub>2-4</sub>alkenyl substituted with one or more of aryl, heteroaryl, cycloalkyl, heterocyclo, alkoxycarbonyl, phenyloxy, and/or benzyloxy, and

each of said ringed groups of  $R_{18}$ ,  $R_{19}$ , and  $R_{20}$  in turn is optionally substituted with one to two  $R_{36}$ ;

R<sub>21</sub> and R<sub>22</sub> are selected from alkyl and substituted alkyl;

R<sub>23</sub> and R<sub>24</sub> are independently selected from hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, heterocyclo, and cycloalkyl;

R<sub>28</sub> is hydrogen, alkyl, or substituted alkyl;

R<sub>36</sub> is halogen, methoxy, nitro, phenyl, phenyloxy, or alkylamino;

n is 0, 1, 2, 3 or 4;

r and s are 0 or 1;

x is 0, 1, or 2;

y is 0, 1, 2, 3 or 4; and

z is 0, 1, or 2.

## 15. (Canceled)

16. (Currently Amended) A compound according to claim 15, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which E is

- 17. (Currently Amended) A compound according to claim 14, or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof, in which G is NHC(=O)(alkyl) or NHC(=O)phenyl.
- 18. (Currently Amended) A compound according to claim 1, having the formula,

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

or

or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof.

- 19. (Currently Amended) A pharmaceutical composition comprising at least one compound according to claim 1 or a pharmaceutically-acceptable salt[,] or hydrate, or prodrug thereof; and a pharmaceutically-acceptable carrier or diluent.
- 20. (Withdrawn) A pharmaceutical composition comprising (i) at least one compound according to claim 1 or a pharmaceutically-acceptable salt hydrate, or prodrug thereof; (ii) at least one second compound effective for treating an inflammatory or immune disease, a cardiovascular disease, or a neurodegenerative condition; and (iii) a pharmaceutically-acceptable carrier or diluent.
- 21. (Withdrawn) The pharmaceutical composition according to claim 20 in which the at least one second compound comprises a phosphodiesterase inhibitor.
- 22. (Withdrawn) A method of treating a melanocortin-receptor associated condition, the method comprising administering to a warm-blooded species in need of such treatment a therapeutically-effective amount of at least one compound according to claim 1.
- 23. (Withdrawn) The method of claim 22 in which the melanocortin-receptor associated condition is an MC-1R or MC-4R condition.